

CLAIMS

1. An aqueous-liquid-absorbing agent, which is an aqueous-liquid-absorbing agent comprising water-absorbent resin particles as essential components, wherein the water-absorbent resin particles are obtained by a process including the step of polymerizing a water-soluble ethylenically unsaturated monomer and have a crosslinked structure in their inside; with the aqueous-liquid-absorbing agent being characterized by exhibiting an absorption rate (FSR) of not less than 0.2 g/g/s, a water absorption capacity (CRC) of 5 to 25 g/g, a saline flow conductivity (SFC) of not less than 400×10^{-7} cm³·s/g, and a wet porosity of not less than 20 %.
2. An aqueous-liquid-absorbing agent according to claim 1, which is a particulate shape and of which not less than 90 weight % is in the form of particles having particle diameters in the range of 150 to 600 μm .
3. An aqueous-liquid-absorbing agent according to claim 1 or 2, wherein at least a portion of the water-absorbent resin particles are agglomerate particles.
- 20 4. An aqueous-liquid-absorbing agent according to any one of claims 1 to 3, wherein the water-absorbent resin particles are surface-crosslinked ones.
5. An aqueous-liquid-absorbing agent according to any one of claims 1 to 4, which further comprises a liquid-permeability-enhancing agent.
- 25 6. A process for production of an aqueous-liquid-absorbing agent including water-absorbent resin particles as essential components, which process comprises the steps of: preparing an aqueous monomer solution including a water-soluble

ethylenically unsaturated monomer and an internal-crosslinking agent of not less than 0.2 mol % in ratio to the monomer; and then polymerizing and internal-crosslinking the water-soluble ethylenically unsaturated monomer in the aqueous monomer solution to thereby form a hydrogel; and then extruding the 5 hydrogel from a perforated structure having perforation diameters in the range of 0.3 to 6.4 mm to thereby pulverize the hydrogel to thus obtain pulverized gel particles; and then drying the pulverized gel particles to thereby obtain the water-absorbent resin particles.

10 7. A process for production of an aqueous-liquid-absorbing agent according to claim 6, wherein at least a portion of the pulverized gel particles are agglomerates.

15 8. A process for production of an aqueous-liquid-absorbing agent according to claim 6 or 7, which process further comprises the step of surface-crosslinking the water-absorbent resin particles.

9. A process for production of an aqueous-liquid-absorbing agent according to any one of claims 6 to 8, which process further comprises the step of subjecting the water-absorbent resin particles to treatment for liquid permeability enhancement.

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10. A process for production of an aqueous-liquid-absorbing agent according to claim 9, wherein the treatment for liquid permeability enhancement is carried out by adding a liquid-permeability-enhancing agent.

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11. A process for production of an aqueous-liquid-absorbing agent according to claim 10, wherein the liquid-permeability-enhancing agent is at least one member selected from among polyvalent metal compounds, polycationic compounds, and inorganic fine particles.

12. A process for production of an aqueous-liquid-absorbing agent according to any one of claims 6 to 11, wherein the aqueous monomer solution has a monomer concentration of neither lower than 35 weight % nor higher than a saturated 5 concentration.